

A CORRESPONDENCE

in "The Daily Mail"

BETWEEN

SIR VICTOR HORSLEY

AND

DR. WALTER R. HADWEN

ON

VIVISECTION,

September, 1908.

SUPPRESSED LETTERS

Also a Letter by Dr. Durham,
with the Suppressed Reply.

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The correspondence that follows is offered to the public as illustrating the claims of Vivisection, put forward by one of the foremost vivisectors of the day, together with a reply to those claims made by the most prominent medical anti-vivisectionist. No demand is made on the reader save that he should carefully weigh the arguments on both sides, but his attention is drawn to the singular fact that on one side only—and that not the one which is popularly credited with attack and abuse—has argument given place to personalities of an untrue and libellous character. The Editor of the newspaper which allowed such personalities to be introduced into a correspondence and refused to admit a reply thereto cannot be held free from blame.

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THE "DAILY MAIL" CORRESPONDENCE.

ASSERTIONS OF SIR VICTOR HORSLEY AND CHALLENGE BY DR. HADWEN.

[FROM "THE DAILY MAIL," WEDNESDAY, SEPT. 2, 1908.]

EXPERIMENTS ON ANIMALS.

"THE DEBT OF SUFFERING HUMANITY."

By SIR VICTOR HORSLEY.

To the Editor of THE DAILY MAIL.

SIR,—A short time ago a letter was published in *The Daily Mail* expressing a desire for information in regard to the part which has been played by the use of experiments on animals for the relief of suffering.

I therefore ask your permission to respond to the request in so far as it is at all possible to deal with a subject of such magnitude in the columns of a daily journal. Confining my remarks to the work of the last fifty years only in the subject of infectious diseases, I would begin by pointing out that the whole discovery of the parasitic nature of an immense number of maladies, whether surgical or medical, together with the consequent modern methods, of

dealing with or preventing them, is the direct outcome or development of the experimental researches of Pasteur and Lister, and it is only when this fact is continually borne in mind that it is possible to realise what an immense debt suffering humanity and suffering animals owe to animal experimentation. The following are some examples of the beneficial results of their work :—

BOON OF ANÆSTHETICS.

Up to some forty or fifty years ago the case of any person who was in need of surgical treatment was indeed a deplorable one. There was no anæsthetic to obliterate the pain of cutting operations, so that the fear as well as the physical distress of the patient must have been extreme. Suppuration, frequently sloughing of the wound, great pain, and prolonged fever were (except by accident) the invariable consequences of any surgical procedures.

The mortality was extremely high. Operations upon the internal organs were in the vast majority of cases fatal, patients with abdominal diseases succumbing to acute peritonitis, which, as is well known, is one of the most distressingly painful modes of death. Surgical wards were veritable death-traps, and patients could with difficulty be persuaded to enter them, dreading not only the terrors of the operation itself, and the subsequent inevitable weeks of acute and wearing suffering, but the prolonged period of disablement, weakness, and semi-starvation at home consequent on the suppuration and fever which they would have to go through.

To those familiar with descriptions of hospital wards under the old *régime*, the change which has been effected can only be described as stupendous. Owing to the experiments of Lord Lister and Pasteur, the blood-poisoning diseases, hospital gangrene, pyæmia, septicæmia, erysipelas, have practically become extinct. Internal operations can be safely

undertaken for relief, and no longer death is the rule. Wounds heal quickly and without pain or fever, so that surgical wards are no longer shunned by patients, who often benefit very greatly in general health from their stay in the hospital.

In the incalculable diminution of suffering thus brought about in this one field of surgical operations alone, your correspondent's request for evidence as to the beneficent results obtained from experiments on animals must, I think, have been most amply satisfied.

I will, however, proceed to touch upon another point in this connection—namely, the immensely important subject of the employment of anæsthetics. In this field also the understanding of their mode of action, the consequent careful choice of drug, according to the nature of the operation, and the accurate determination of a safe dosage and method of giving it (all points of vital consequence to the patient), not only have been worked out by experiments on animals, but even in the case of ether (the safest anæsthetic we possess) Morton, the discoverer of its use, tried, as I hold he was morally bound to do, its poisonous effects upon a dog before giving it to men. Flourens also did the same.

HYDROPHOBIA.

The present generation is naturally liable to forget that hydrophobia was at one time a disease of this country. The cause of this terrible malady and real method of extermination and treatment were discovered solely by the experiments upon animals of Pasteur. In other countries, when rabies has not been exterminated, the mortality from hydrophobia of infected cases has been reduced from about 15 per cent. to 0·4 per cent.

But though the complete success of the methods born of the Pasteur experiments may have caused

many to forget that hydrophobia was once a justly feared terror in the land, there is one disease which unfortunately we have at present but little chance of forgetting, namely, tuberculosis, which, partly for its appalling prevalence and partly for its hitherto supposed incurable character, has been the greatest scourge to which the nation has been exposed. Of late years, however, a remarkable fall in mortality from this cause has taken place.

TUBERCULOSIS.

Since the true, *i.e.*, the microbic, nature of the disease has been recognised, the consequent appropriate methods of combating it have been adopted. Sources of infection in tuberculous animals have been detected and destroyed. Spread of infection from case to case has been largely prevented, and cases which formerly would have succumbed after a lingering and painful illness can now be cured. It is difficult to over-estimate the share which experiments on animals have taken in bringing about this tremendous diminution in the pain and poverty of the community.

The claims upon your space prevent my further extension of this letter, but before closing there is one other beneficent result of animal experimentation to which I desire very briefly to refer.

When everything that knowledge and skill can effect has been essayed and failed, there still, unfortunately, remain many conditions when all that can be done for the patient is to secure by the medical use of hypnotics and narcotics temporary unconsciousness of the tortures of disease. The incalculable value of the power of obtaining such relief can only be appreciated by those who are called upon to suffer or to treat suffering. It is a fact that the value of, practically every drug introduced within the last thirty years for this most necessary and most merciful purpose has been determined by experiments on animals.—I am, &c.,

VICTOR HORSLEY.

[FROM "THE DAILY MAIL," WEDNESDAY, SEPT. 9.]

VALUE OF VIVISECTION.

DEMAND FOR PROOF.

To the Editor of THE DAILY MAIL.

SIR,—Sir Victor Horsley is not accurate in his statements. He talks of the "discovery of the parasitic nature of an immense number of maladies . . . with the consequent modern methods of dealing with or preventing them." I challenge Sir Victor Horsley to prove to demonstration the parasitic origin of any one of the maladies referred to, or to show by any truly scientific evidence that the "modern methods" deduced from the germ theory of disease have ever prevented the "infectious diseases" he refers to in a single instance.

Your correspondent draws a graphic picture of the condition of hospital surgical wards fifty years ago. He says the different conditions of to-day are due to the discoveries of Pasteur and Lister. I deny the assertion and I challenge him to prove it. The Listerian theory of antisepsis has had to be given up and the aseptic theory—that is, *common cleanliness*—demonstrated by Semmelweis in the Vienna Hospital in 1847, and prosecuted by Bergmann in Germany and Lawson Tait and Bantock in this country, is the "modern method" to which we owe our surgical success.

Sir Victor Horsley says "the accurate determination of a safe dosage and method of giving anæsthetics has been worked out by experiments on animals." Perhaps, then, he will account for the numerous inquests which are held in consequence of failure in this respect, and in which the anæsthetist is invariably

exonerated. Animals are the last creatures which could possibly form an efficient guide as to anæsthetic administration in man. He instances ether as having been first tried upon a dog before being administered to man. Even if such had been the case, no conclusive evidence could have been gained as to the human species. As Professor Starling—himself an arch-vivisector—told the Royal Commission on Vivisection, “The last experiment must be on man.” But Erichsen declares that the first experiment in anæsthesia was by Horace Wells, a dentist of Hartford, Connecticut, with nitrous oxide gas upon himself. That was in 1844.* A pupil of his, Dr. Morton, in 1846 used ether instead of nitrous oxide for the first time upon some dental patients, and it was first used in England in December of the same year by Liston upon human patients when Erichsen was present. The discovery of chloroform in 1847, as an anæsthetic, as we well know, was brought about entirely by experiments which Professor Simpson, of Edinburgh, carried out upon himself and friends.

How can hydrophobia have been exterminated in this country by Pasteurism, seeing that the Pasteurian treatment has never been adopted here? Mr. Walter Long and Company say it has been exterminated by muzzling. I will not argue that point. I simply say it is not by Pasteurism. I challenge Sir Victor Horsley to prove that Pasteurism in France has ever saved a life. I am prepared to prove to him that the hydrophobia mortality has increased since its adoption in that country.

Let your correspondent provide evidence to support his contention that tuberculosis has decreased in consequence of the alleged discovery of the microbic origin of the disease. It would be impossible to do so. Tuberculosis has been decreasing for many years

* Erichsen's statement, however, is not quite accurate. This gas was used by Mr. James Stodart and Mr. (afterwards Sir Humphrey) Davy in experiments upon themselves in 1801.—W. R. H.

side by side with the prosecution of sanitary laws. The microbic theories of Koch based upon animal experimentation have turned out a fiasco. The recognised remedy for consumption is fresh air. It cannot even be definitely proved that the tubercle bacillus is the *fons et origo* of the disease.

Finally, Sir Victor Horsley asserts, in the same bold way that he adopts throughout, that the value of narcotic drugs has been determined by experiments on animals. These particular drugs are so contrary in their action in numerous instances in animals and man that this closing statement is, perhaps, the rashest of all the rash assertions in your correspondent's long letter. Again I ask for proof.

WALTER R. HADWEN, M.D.,

Hon. Secretary British Union for the Abolition of
Vivisection, 32, Charing-cross, S.W.

[The above letter only appeared in certain editions of *The Daily Mail*.]

[FROM "THE DAILY MAIL," SEPTEMBER 15.]

SIR VICTOR HORSLEY.

Respecting the discovery of the parasite causing tuberculosis and of those producing other infectious diseases, I notice that the secretary of the society for the total abolition of experiments on animals (N.B., man excluded), signing himself Walter R. Hadwen, M.D., declares himself ignorant of any scientific method whereby a malady can be found to have a parasitic origin.

The Daily Mail cannot be exploited as a means of filling up all the hiatuses in Dr. Hadwen's medical education, but we may take this central point, since the postulates laid down by Dr. Koch more than a quarter of a century ago, and by following which

discoveries of the utmost value to the whole animal kingdom (N.B., man included) have been gained, may be of interest to your readers as well as information to Dr. Hadwen. From the blood or tissues of man or an animal suffering from a disease repeated cultivations are laboriously made by Pasteur's methods in a bacteriological laboratory until any microbe which may be present is obtained growing actively and in pure culture—*i.e.*, alone and uncontaminated by the concurrent growth of any other microbe.

The culture of such microbe is then injected hypodermically or into the circulation of a normal animal.

If this animal develops the symptoms of the disease, and if from its blood or tissues the same microbe is again obtained in pure culture, that organism is accepted as being the parasite which causes the disease.

VICTOR HORSLEY.

[FROM "THE DAILY MAIL," SEPTEMBER 16.]

DR. HADWEN.

SIR,—Sir Victor Horsley has evaded every point in my challenge for proof of his statements, and has avoided all reference to the points in which I definitely showed him to be inaccurate.

He professes to deal with one point and one point only—namely, that which concerns the germ theory of disease—by quoting the technique of microbe cultivation based upon the postulates of Koch. This is not an answer to my challenge, and his conclusions are again inaccurate, as I will show.

Koch's postulates are as follows: (1) The alleged specific micro-organism must be found in the disease of which it is supposed to be the sole cause. (2) It must not be found apart from the disease it is supposed

to originate. (3) It must reproduce the specific disease of which it is supposed to be the author when inoculated into the body of a lower animal.

Allow me to illustrate this in the case of Klebs Löffler bacillus of diphtheria. (1) The discoverer of the germ has himself acknowledged that he found it absent in 25 per cent. of the cases which he had diagnosed as diphtheria. (2) It is well known, and has recently been reaffirmed before the British Association, that it is frequently found in perfectly healthy throats. (3) When communicated to guinea-pigs and other animals the disease produced bears no resemblance to the diphtheria of the human species. Every postulate upon which Sir Victor Horsley relies is falsified. The trouble between English and German bacteriologists concerning the microbic origin of bovine and human tuberculosis saves me from dealing with that matter.

Moreover, there is a grave fallacy in all such experiments, inasmuch as you cannot transfer the micro-organism apart from the medium in which it exists, and there is every reason to believe that these micro-organisms are the results of disease and not their cause.

I would remind Sir Victor Horsley that I am not "the secretary of the society for the total abolition of experiments on animals (N.B., man excluded)." But I am, as I accurately signed myself, "Hon. Secretary of the British Union for the Abolition of Vivisection." Most decidedly man would be included were any known deliberate attempt made at the exploitation of human beings in a similar manner to that of our helpless and speechless fellow-creatures.—I am, Sir, your obedient servant,

WALTER R. HADWEN, M.D.

32, Charing-cross, September 15, 1908.

[N.B.—The last paragraph was not inserted in some editions of *The Daily Mail*.]

[FROM "THE DAILY MAIL," SEPTEMBER 22.]

SIR VICTOR HORSLEY.

To the Editor of THE DAILY MAIL.

Now for Dr. Hadwen and his alternate assumptions of ignorance and omniscience. In his first letter he professed himself ignorant of the existence of any scientific demonstration that any disease is ever due to a parasite or germ.

To this I replied by quoting the ordinary text-book postulates of Koch, which are known to and accepted by the whole scientific world, and have resulted, as I stated in my last letter, in many brilliant discoveries of such germs.

PASTEUR AND KOCH.

In his second letter he admits, without the slightest apology to your readers, that he knew of this universally accepted scientific demonstration even while suggesting to your readers that no such method existed. I must confess that it does not appear to me just that my time or that of any other busy man should be wasted in discussion with a contestant of this character, but I cannot pass by his wholesale travesty of bacteriological methods and allow him to mislead your readers by a confused statement on a complex subject like diphtheria. Let us begin at the beginning. Koch's first great work was the elaboration of the life history of the parasite or germ of anthrax—viz., the bacillus anthracis. W. R. Hadwen, M.D., stands alone in the world in professing to believe, as he tells your readers he does, that the bacillus is not the "cause" of the virulent disease anthrax, but only one of its "results." If Dr. Hadwen will inject a syringe of the anthrax bacillus into one of his veins he will soon be impressed by the scientific truth of Koch's postulates, and that his fatal illness is a "result" of which the bacillus

is the "cause." Until he performs this simple experiment your readers might well be spared the trouble of perusing what every honest medical man knows to be the exact reverse of the ascertained facts of pathology. I may perhaps conclude with a brief statement of the latest outcome of Koch's rules and the germ theory, and your readers will recognise how flimsy are the misrepresentations by which Dr. Hadwen seeks to obscure what is really a plain and simple subject. This, the latest example of Pasteur's and Koch's monumental work, is the case of Malta fever. This painful disease, often fatal or for some years shattering to the constitution, has for many years caused heavy losses to the nation by its ravages among the soldiers and sailors stationed at Malta. It is, indeed, computed that some 17,000 men have been invalided by it.

Using Koch's postulates and Pasteur's methods, Colonel Bruce, R.A.M.C., discovered by experiments on animals that the parasite causing the disease was a microbe which he named *micrococcus melitensis*, and which he had by indefatigable laboratory work isolated in pure culture.

The next step was the discovery that the disease was not a drain malady or air-borne, as had been imagined by the health authorities, but that the microbe was harboured by the goats in the island and was present in their blood and milk.

Finally it was proved that this milk was the vehicle by which this terribly poisonous parasite was introduced into the system.

The result of this magnificent work has been the practical freedom of our men from untold misery and suffering, for whereas in 1905 no fewer than 643 were struck down, there were only seven cases in 1907.

What a contrast your readers may now draw between the vivisectionist and the anti-vivisectionist! On the one hand Colonel Bruce, M.D., working incessantly for his fellow-men and receiving honours and thanks

from the British Medical Association for his noble addition to the resources of civilisation against disease and misery ; and on the other hand Walter R. Hadwen, M.D., sitting at home penning scurrilous abuse of Colonel Bruce and his colleagues, and receiving—the subscriptions of the public !

On this last point one cannot but be struck by the attitude of our nation towards experimental science.

While every advance in knowledge gained, as I have shown, by experiments on animals is eagerly accepted, the anti-vivisectionists have, as Mr. Coleridge boasted to the Royal Commission, extracted from the pockets of the public a sum not less than £80,000.

Yet they (the anti-vivisectionists) have not discovered, or even attempted to discover, anything that would relieve pain or arrest disease in man or the lower animals. No ; the whole of this vast sum of money has passed into their hands, and has resulted in nothing to the profit or well-being of their fellow-creatures.

VICTOR HORSLEY.

[SUPPRESSED LETTER.]

DR. HADWEN.

To the Editor of THE DAILY MAIL.

SIR,—I do not complain of the lack of courtesy displayed by Sir Victor Horsley in each of his letters, but I am justified in complaining of his persistent evasions of straightforward issues and of misrepresentation. He says :—

Dr. Hadwen . . . in his first letter professed himself ignorant of the existence of any scientific demonstration that any disease is ever due to a parasite or germ. . . . To this I replied by quoting the ordinary postulates of Koch. . . . In his second letter he admits, without the slightest apology to your readers, that he knew of this universally accepted scientific demonstration even while suggesting to your readers that no such method existed.

What are the facts ? My statement in my first letter was as follows :—

I challenge Sir Victor Horsley to prove to demonstration the

parasitic origin of any one of the maladies referred to, or to show by any truly scientific evidence that the "modern methods" deduced from the germ theory of disease have ever prevented the "infectious diseases" he refers to in a single instance.

Sir Victor Horsley, as your readers are well aware, not only failed to face my challenge, but he failed to correctly or fully quote the postulates of Koch upon which he professes to base his theory. In my second letter, therefore, I quoted Koch's postulates *in extenso* and quoted the cultivation of the Klebs Löffler bacillus of diphtheria in order to show that those postulates failed in every particular in establishing the claims of that bacillus as the origin of the disease in question.

How does Sir Victor Horsley meet my plain logical conclusion and my repeated demand for "proof" of his position? By complaining that his "time ought not to be wasted with a contestant of this character," and by dubbing my calm request a "wholesale travesty of bacteriological methods"! He deliberately runs away from diphtheria, as he had already run away from the other diseases with regard to which I pointed out his inaccuracy, and now actually roams off to anthrax and Malta fever. He occupies more than a column without meeting one of my points, and yet complains of my "wasting his time"!

I will not argue with Sir Victor Horsley as to whether I "stand alone in the world" in my contentions or not. I simply ask him to prove to me that he is right and I am wrong. So far he has made no attempt to do so. With your permission I will deal with the two fresh instances he adduces, and your readers will be able to judge whether he evades my answers in these further illustrations as he has done in every other.

I will answer his anthrax illustration very briefly by saying that no less an authority than Mr. Stockman, chief veterinary officer of the Local Government Board, told the Royal Commission on Vivisection (Q. 2,670): "There is great dubiety about establishing the diagnosis of anthrax in animals." Also in the last report

of the medical inspector of the Factory Department of the Home Office it is pointed out that cases of anthrax occur without the bacillus being found, and the importance is asserted of having regard to clinical as well as bacterial evidence. Thus again Koch's postulates are at fault. How does Sir Victor Horsley explain this ?

Now a few words as to Malta fever. But first permit me to protest against Sir Victor Horsley's unwarrantable language in speaking of "Walter R. Hadwen, M.D., sitting at home penning scurrilous abuse of Colonel Bruce and his colleagues, and receiving—the subscriptions of the public!" Unlike Sir Victor Horsley, I am careful to avoid personalities. I have never written a word about Colonel Bruce and his colleagues in my life ; and as for any pecuniary gain in my advocacy of anti-vivisection, I have never received a penny-piece of pay from the public ; my spare time and money I devote freely to the righteous cause I have at heart.

In regard to Malta fever investigations, Sir Victor Horsley writes of them as "the latest outcome of Koch's rules and the germ theory." Now, the strange thing is, that the very postulate which Sir Victor Horsley holds to be, apparently, of chief importance (for it is the only one he has quoted)—namely, that an inoculation of germs into an animal's body must produce a disease similar to that of which they are supposed to be the origin—is here, as in diphtheria, utterly falsified. I quote against Sir Victor Horsley Colonel Bruce's own words in his Royal Commission evidence (Q. 14,242) :—

The micro-organism (of Malta fever) did multiply in their bodies (those of the inoculated animals), but it did not give rise to any ill-health ; it *did not give rise to any fever*. By looking at the goat you could not say that that goat was ill—it gave as much milk as a perfectly healthy goat, it was as fat, as smooth-looking as a healthy goat, so that it was only by the blood examination that it was suspected that something was occurring.

In other words, Koch's postulate was not borne out ; the micro-organisms were multiplied, but the

disease was not produced. Surely this was rather an evidence that the micro-organisms have nothing to do with it !

But Colonel Bruce himself is not exact in his experiments nor correct in his conclusions. He told the Royal Commission that (Q. 14,240) the goat "does not even take tuberculosis." This is flatly denied by the Report of the experiments of the Royal Commission on Tuberculosis, Part I., pp. 63, 78, 79, where it asserts goats are "very susceptible."

Further, Malta fever is not restricted to Malta, but occurs in India and many parts of the Mediterranean Coast, in the Philippines and elsewhere, where goat's milk is not partaken of, but where insanitary conditions abound. The Malta harbour has been used as a sewer for hundreds of years, and the decrease of Malta fever has been concurrent with recent improved sanitary conditions there. But Colonel Bruce, in obedience to a "scientific" theory, did not consider the foul conditions of Malta Harbour responsible, because he could not find the *micrococcus melitensis* in the harbour water !

Sir Victor Horsley bases the responsibility of Malta fever upon goat's milk because the attack rate among the soldiers in 1906-7 was so much lower than in 1905. But the statistical fallacy lies in this : That the consumption of goat's milk was not stopped until July, 1906, and yet all the previous part of the year the attack rate was declining, proving that other factors were at work. And not only so, but other fevers for which the *micrococcus melitensis* was not responsible declined during the same period. How does Sir Victor Horsley explain this ? Certainly not by the goat's milk theory !

Surely if a certain number of men drinking goat's milk had Malta fever, and others who did not drink it were free, common-sense could have dictated a probable cause without torturing hundreds of monkeys to no purpose. But, as a matter of fact, numbers drank

alleged contaminated goat's milk without being affected, thus knocking on the head another of Koch's postulates.

Colonel Bruce informed the Commission (Q. 14,261) that a Local Government Board man, who was recommended by Mr. Power, went out to Malta to examine by the method of statistics the incidence among those who drank water, beer, milk, &c. ; but after very hard work for six or seven months he came to the conclusion that milk at least was not the cause of the fever, and this conclusion was also reached independently by Colonel Davis and others sent out to investigate from the epidemiological standpoint—which, 'if the germ theory be correct, ought to have ratified it.

But, in conclusion, let me ask Sir Victor Horsley one more question : If, as he avers, Malta fever is due to this remarkable germ, how is it that the " modern methods " of serumtherapy, which he declares to be the scientific outcome of the discovery, fail to prevent it ? Colonel Bruce himself (Q. 14,374) declares " it has failed."—I am, Sir, your obedient servant,

WALTER R. HADWEN, M.D.,
Hon. Secretary, British Union for the
Abolition of Vivisection.

32, Charing-cross, S.W., September 22.

[FROM "THE DAILY MAIL," SEPTEMBER 11.]

STANDARDISATION OF DRUGS.

To the Editor of THE DAILY MAIL.

SIR,—There is one class of experiment in which the value of trial upon animals is shown day by day, and which has not received attention in the present corre-

spondence on the subject. I refer to the *physiological standardisation* of certain drugs, among which ergot, digitalis, its allies, and cannabis indica may be mentioned. It is a well-known fact that preparations of such drugs are apt to vary very considerably in their efficacy, however carefully the crude drugs may be selected.

How many poor women have lost their lives, or have been retarded in recovery through want of really effective ergot it is impossible to say ; but it may be asked, Do husbands, members of some " anti-vivisection society," wish to see valuable time wasted while experiments are being made on their wives with preparations of unknown activity, when reliably tested ones can be obtained ?

Again, there is the constantly increasing number of new and valuable drugs, which are tried exhaustively upon animals before they are used upon man. In such cases questions of the known facts of bacteriology, asepsis, and antiseptis, which some people seem to find difficult to grasp, do not enter. If Dr. Hadwen really wants proof, say, of the effects of antiserums and of the facts of immunity, let him take out a vivisection licence in this country, or let him go abroad and work in a laboratory ; let him study the immunity which can be produced by means of snake venom against snake venom, or of ricin (the poison of the castor-oil bean) against ricin. Until he has done so let him not ask for proofs on paper—let him see with his own senses on his own work.

Some correspondents have written of cruelty and brutality, and I may say that I have seen more cruelty (and that wanton) in half an hour on market day in this city than I have during all the years from 1885 to 1905 in my work in physiological and pathological laboratories.

Finally, may I point out that a very sensible reply is given by the father in the old-fashioned child's book, " The Swiss Family Robinson " ? The children ask if they may eat some nice-looking fruit ; they are

told to try it upon the monkey first. Who would not do the same under the same circumstances for their children's sake ?

HERBERT E. DURHAM,
Hereford. M.A., M.B., B.C., F.R.C.S.

[SUPPRESSED LETTER.]

To the Editor of THE DAILY MAIL.

SIR,—Dr. Herbert Durham says he has spent twenty years “in physiological and pathological laboratories,” and he advises me to “take out a vivisection licence and . . . work in a laboratory,” if I want proof of “the effects of antiserums and of the facts of immunity.” I should have thought the proper place to learn “facts” and “effects” would be by the bedside of human patients, and not among dogs and cats and guinea-pigs. I would remind your correspondent of the statement published by Koch (who, as a renowned vivisector and bacteriologist, will be respected by him) when writing on this subject in his “Cure of Consumption” p. 8 : “Here, again, is a fresh and conclusive proof of that most important rule for all experimentalists, that an experiment on an animal gives no certain indication of the result of the same experiment upon a human being.”

When Dr. Durham asks sensationally : “Do husbands wish to see valuable time wasted while experiments are being made on their wives with preparations of unknown activity, when reliably tested ones can be obtained ?” he is simply playing to the gallery. How are the drugs he refers to tested ? In what way are they “standardised ?” By experiments on the bodies of animals not two of which can be guaranteed alike. Such “standardisation” is so much clap-trap. For some years now the medical profession has been placing itself body and soul in

the hands of pharmaceutical manufacturers, who, with their enormous enterprise and ingenuity, provide brains, prescriptions and drugs for their confiding clients. It is simply one of the results of the absurd medical fashion of the time which necessitates certain manufacturing firms keeping huge menageries of living creatures for the purpose of so-called drug testing, instead of relying upon the old-fashioned chemical methods which invariably provide satisfactory results. I do not believe that there is a single medical man in actual practice who would be prepared to justify by his own experience in definite cases Dr. Durham's unwarranted insinuation that "many poor women have lost their lives, or have been retarded in recovery through want of really effective ergot." I am amazed at any medical man with presumed experience in the cases to which he refers venturing upon such a remarkable utterance.

Dr. Durham invites me to "study the immunity"—in a laboratory—"which can be produced by snake venom against snake venom." I prefer to see what it can accomplish elsewhere. Here is the result in India before and since the introduction of the wonder-working laboratory snake serum :—

Deaths from snake-bite in 1876,	15,819— <i>i.e.</i> ,	85·4	per million living.
" " " " 1905,	21,797— <i>i.e.</i> ,	94	" " "

As Sir Lauder Brunton told the Royal Commission on Vivisection, you require a special serum for every kind of snake, "that prepared for a krait will not act for a cobra. . . . The difficulty is that the serum and the snake are not likely to be in the same place." This witness declared that common permanganate of potash was "a universal remedy." This was confirmed by Major Rogers, Professor of Pathology in the Calcutta Medical College, who said, "It was known thirty years ago that if permanganate of potash were mixed with cobra venom outside the body it would destroy the venom." But so far

as the snake serum was concerned, he confessed that it was useless to give it unless you first found out what kind of snake bit the victim. So I fear that Dr. Durham's kind advice to me to become a vivisector and "see with my own senses my own work," would not be of much practical service.

I am glad, however, to find one point in which I can heartily agree with him. "In the 'Swiss Family Robinson,'" he says, "the children ask if they can eat some nice-looking fruit; they are told to try it on the monkey first." And with a triumphant interrogatory your correspondent concludes his letter, "Who would not do the same *under the same circumstances* for their children's sake?" The italics are mine. It is interesting to have the testimony of a vivisector to the intelligence and natural instinct of the Simian race. By nature a frugivorous animal, the monkey possesses the ability, denied to its superior in the scale of creation, of intuitively distinguishing harmless from harmful fruit. I ask if a creature so useful and intelligent and so closely allied to ourselves anatomically and physiologically should be submitted to the horrible and unnecessary experiments in regard to which your correspondent, Sir Victor Horsley, has to a large extent earned his fame?—I am, Sir, your obedient servant,

WALTER R. HADWEN, M.D.,
Hon. Secretary, British Union for the
Abolition of Vivisection.

32, Charing Cross, S.W., September 11.

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